

Abstract

When the resolution for a specific gradation is enhanced, the resolution for the other gradations can be relatively degraded. It used to be difficult to carry out color conversion with accuracy in the high-lightness range without the occurrence of tone jump. A color conversion table which defines the correspondence between ink value data which specifies the ink quantities of inks in individual colors used in a printing device and the color component values of various colors used in another image device is generated. At this time, correction for interpolation accuracy enhancement is carried out beforehand so that colors in the low-lightness range will be larger in number than colors in the high-lightness range. This is intended to compensate the resolution which is relatively degraded in the low-lightness range by correction for resolution enhancement by interpolation accuracy. Thereafter, correction for resolution enhancement is carried out to create the ink value data. Patches printed based on the ink value data are subjected to color measuring to generate a color conversion table. When correspondence definition data is created, first gradation value data wherein the magnitude of gradation values and the ink quantity are in substantially linear correspondence with each other is acquired. Further, the first gradation value data is subjected to γ correction with a higher rate of increase applied to a smaller gradation value. Thus, ink value data wherein the relative resolution in the high-lightness range is enhanced is created.